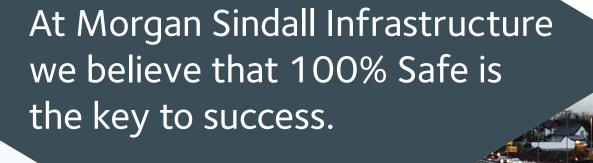
# SAFER HIGHWAYS MAGAZINE **ISSUE 4** 2019 Q1 ROADWORKS SAFETY CRISIS Amey Highways share the shocking statistics around motorists compliant through roadworks. ANOTHER ROADWORKER EVERY DEATH IS ONE TOO MANY **PLUS Embedding Safety Cultures** An Age Old Problem Health as an equal

Morgan Sindall talk about the need to own safety from the bottom of the workforce up.

Skanska examine the challenges industry faces in tackling an ageing workforce

Steve Perkins presents the case for hygiene as an equal to safety





& B'ham M 5

A 4123
B'ham(W)
Dudley

STOP People & Plant
Ahead!
Approaching Or Passing
Tomy

1

A safe and healthy environment for our workforce, road users and communities is at the heart of everything we do - from project concept to completion.

We provide:

**Safe places** which provide security and protection from harm

**Safe by choice** in that we choose to be safe and healthier from the outset

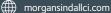
**Safe relationships** where we actively engage throughout the industry to share and improve

**Safe by design** from concept to completion seeking to consider all our stakeholders' needs

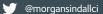
**Safe lives** to ensure the health and wellbeing of our people is a priority.

Everyone has the right to be

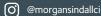
100% Safe



in morgan-sindall







# Dear Friends & Colleagues

Welcome to the third edition of SH Magazine, which also comes at a time when we continue to broaden our industry-wide engagement programme with the launch of two new events for 2019.

Almost 15 months since we launched our Legacy Programme, *The Road to Better Wellbeing*, I am proud to announce that on the 20th June this year we will be holding our first Safer Highways Mental Health Summit at the House of Commons, with **Lord Dennis Stevenson** (co-author of the government's **Thriving at Work** report) very kindly agreeing to deliver the Keynote presentation.

The event will be chaired by Karl Simons, Chief Health, Safety & Security Officer at Thames Water and at the time of going to press was already almost fully booked, THREE MONTHS IN ADVANCE.

I am very proud of the work that both the Safer Highways Board and Advisory Council have done to effectively drive on this initiative and ensure that we effectively can cascade the benefits down throughout the whole supply chain.

In order to do this we have to have a way of training our people in how to deal with mental health in the same way as every workplace has physical first-aiders to deal with workplace physical injuries.

Through our work with the BMH Framework in Construction, we now have a way of doing exactly that as CITB have very kindly agreed to fund a number of mental health first aid instructor courses over the coming months and years.

In effect what this means is that the supply chain can become self sufficient and have mental heal first aid instructors in every organisation.

As a wise man once said, "Why give them a fish when instead we can team them to fish."

Through our collective desire, I genuinely believe we can and will effect positive change, not just in the space around mental health but also beyond into wider health and safety.

However, this can only be done through a sustained commitment to share best practice without condition or commercial advantage, a belief I hope we all share.

This year we, as an industry, have made great strides in the fields of health, safety and wellbeing and for which we should be extremely proud, but we must not rest upon our laurels – we can always do more.

With that in mind, the team at SH are also delighted to share with you a new event which will launch in

April of this year, SH L!ve.

Under the three underpinning valies of Collaboration, Learning and Sharing, SH L!ve; will bean 'industry innovation in safety' event, and will take place on 11th September at the iconic Silverstone.

Already backed by all of the supply chain, SH L!ve will serve as an industry showcase of best practice and the use of technology to better enable our workforce to carry out their daily tasks in a safer, more effective and ultimately more efficient manner. As with all SH events **entry will be free**, aligning with our overwhelming belief that you **cannot put a price upon sharing best practice**.

The event will feature our renowned high-level speaker sessions, but will also incorporate an innovation trail led by our tier 1 contractors and a 'live' dynamic display of some of the cutting-edge technological advances we are making throughout the industry.

I look forward to telling you more about this over the coming weeks.

Lastly, I would like to thank the contributors and supporters of the Safer Highways movement – without you, and your continued enthusiasm for what we do, we would not exist.

Our legacy programme is a testament to your willingness to come together and collaborate for the greater good of the industry as a whole.

Enjoy reading the latest edition of SH Magazine and I look forward to hearing your views going forward.

Kindest regards,

#### **Kevin Robinson**

Editor Safer Highways Magazine kevin@saferhighways.co.uk

# Contents

## **Safer Road Workers**

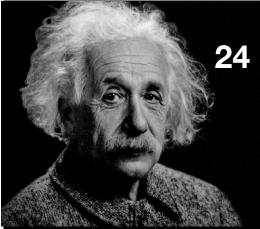


Safer Highways Magazine
Issue 4 - 2019 Quarter 1
Published by Safer Infrastructure Limited
Editor: Kevin Robinson
All enquiries to admin@saferhighways.co.uk



6 Cover Story: James Haluch of Amey

Managing Director of Amey Highways, James Haluch asks how do we tackle motorists nonchalant attitude when it comes to roadworks?



Empowering the individual is key to success

Martin Worthington, SHEQ Director at Morgan Sindall



## Safety

## Safety Cam evidence secures convictions



## Skanska - a learning organisation



# ViewPoint

# Tricia O'Neill, Head of Occupational Health & Wellbeing at Skanska

Effectively dealing with an ageing workforce



### **Innovation**



The future for drones is further than the eye can see

## Wellbeing

Professor Tim Marsh takes a light hearted look at the quotes of Albert Einstein and their relevance to Health and Safety

## **ViewPoint**



# Transforming Roadmarking Sector Safety

Craig Williams, Health and Safety Director at WJ Group talks about how the organisation's ambition and forward thinking ethos has driven a step change by continually finding better and most importantly, safer ways of working.





# Safer Highways Announce Mental Health Summit venue and Date

Safer Highways have announced the date and venue for the inaugural Mental Health Summit.



# Leading on Workplace Health – the Whole Picture

it is time to adopt a strategic approach based on proper risk management says Steve Perkins

## Managing Road Worker Fatigue

Clare Forshaw looks into steps which employers can take to effectively manage levels of fatigue within their workforce and reduce levels of risk.





Kier 'Raises the Bar' on Safety by increasing awareness of poor Mental Health





James Haluch
Managing Director,
Amey Highways



How do we tackle motorists' nonchalant attitude towards safety when it comes to roadworks?

According to research conducted by Opinion Matters on behalf of Amey's highways business, 59% of UK motorists admit to breaking road safety laws. But what steps can our industry take together to ensure that drivers don't flout the law? To stop them putting themselves, roadworkers and other road users at risk of injury or death.

It's extremely concerning that so many British drivers appear to be ignoring safety advice and driving without due care through roadworks. Figures show that nearly six in ten (59%) of road users who took part in our research say their safety consciousness is not as high as it should be when

research say their safety consciousness is not as high as it should be when negotiating roadworks while 74% admit to exceeding speed limits set to protect those working at these sites. 37% of drivers admit to speeding, 24% admit to not giving their full concentration whilst 14% admit not paying attention to road workers.

This blatant disregard for road safety

is more prevalent with younger drivers who appear more likely to take risks, with 82% of 17 to 24-year olds admitting to breaking speed limits in 50mph controlled zones, whilst a further 8% say they go over 65mph.

Figures show that nearly six in ten (59%) of road users who took part in our research say their safety consciousness is not as high as it should be when negotiating roadworks

#### Reflect and react

This research clearly illustrates that motorists need to reflect on their behaviour when driving through roadworks – a challenge that we're aware may take our industry years to influence yet alone significantly improve.

In the past 12 months, there have been over 500 work-related road deaths on UK roads. A shocking figure that bears some reflection.

#### **COVER STORY · COVER STORY · COVER STORY**

Over the past two years, we've experienced 211 incidents involving reckless driving. And the number of accidental incursions - where vehicles enter a sectioned-off area of work for highways operators - reaching close to 5,500 for the same period on the network we manage.

Clearly, it is unacceptable that 87% of the drivers surveyed acknowledged that being a road worker in the UK is a dangerous occupation yet work-related incidents and fatalities are still occurring.

I am only too aware of the suffering of those who are injured, or killed, while simply doing their job. In many cases, even once the physical injuries are healed, the trauma remains in some form, changing their lives, and that of their families, forever. Our people have the right to return home to friends and family safe and well at the end of the day- it's not acceptable to me that this isn't the case.

Very often, despite our best efforts, we have limited influence over the drivers who ignore our signage, damage our vehicles and sadly, at times, injure our workforce. We can, however, use our skills and experience to develop new ways to reduce that risk by being innovative around working methodologies. The question I pose to my team, and the industry, is how do we change driver attitude and behaviour when driving on our roads and through roadworks?

Solving this question won't be achieved overnight. We will need to incorporate mechanisms to raise awareness of the dangers of drivers' attitudes and behaviours as well as trialling new and innovative ways to tackle these problems, and educate drivers, over a sustained period.

#### Vision 2030

In 2018, I launched Vision 2030 to address road worker and road user safety, as part of a comprehensive programme to boost productivity, increase technological innovation, improve efficiency and promote greater diversity across the industry.

We are looking to work collaboratively with others to increase the use of automation and digital technologies to help create a safer working environment for our employees and the travelling public. Our industry peers, supply chain partners and our



clients must work together to develop industry-wide solutions that benefit all, in order to shift behaviours and make our roads safer.

#### Injuries that last a lifetime

We're already in the process of investing in technology that will move our workforce away from working on a live road network. But for one of my team this development was too late. Last April, at approximately 4am on the M73 near Gartcosh, one of our Impact Protection Vehicles (IPV) was struck by an HGV travelling at full speed (50mph).

The question I pose to my team, and the industry, is how do we change driver attitude and behaviour when driving on our roads and through roadworks?

All signs and signalling were in place to protect our traffic

management crew, but unfortunately a crash still occurred, with our IPV driver sustaining injuries from the strike. The impact of the strike caused the IPV to jolt forward around 40 metres. While trying to regain control immediately after the strike the HGV driver swerved into the middle lane and back, and back again, coming to rest just 20 metres short of our crew.

The impact of the strike caused the IPV to jolt forward around 40 metres coming to rest just 20 metres short of our crew.

This is just one example of many. In the last 12 months we've experienced four incidents involving our IPVs being struck by motorists, all of which have had the potential of causing fatalities. And this is just at Amey. I know every other contractor would have their own stories to share.

Our research echoes studies carried out by Highways England in May 2018, which revealed a catalogue of serious



IPV strikes on the network are becoming more and more prevalent and usually result in life changing injuries for the operatives involved.

incidents and near misses ranging from motorists driving into coned-off areas where road workers were working, to physical and verbal abuse
On average, there are nearly 300 reports a week by road workers of incursions and abuse. These are people who are busy improving Britain's 4,300 miles of motorways and strategic roads – just doing their day job and who are just doing their job to go home safe and well every day.

Our research echoes studies carried out by Highways England in May 2018, which revealed a catalogue of serious incidents and near misses ranging from motorists driving into coned-off areas to physical and verbal abuse

George Lee, chief executive of Highways Term Maintenance Association, praised our research, saying that the industry needs to do more to change drivers' behaviours.

We have a responsibility to keep the UK's strategic and local road network safe, congestion-free and efficiently managed. This work is fundamental to the nation's social and economic wellbeing. We all need to play a part in ensuring motorists using our network are aware that their behaviour directly impacts on the safety of those at the forefront of keeping our country moving.





At Amey, we recognise the essential role our people play in keeping our teams, our clients and the people around us safe.

Our values of Putting People First, Delivering Great Service and Creating Better Solutions underpin everything we do, so we can deliver on what we promise in a working environment that protects our people.

For us, there's only one number we find acceptable when it comes to harm and injuries at work – zero. Our HSEQ Transformation programme is delivering Better Systems, Better Support and Better Skills which provides a framework so our people know how we do things, the reasons why we do them and understand that we are all accountable for everything we do.

In 2018 we reduced our lost time injuries by 52% and our lost time days by 54%. We also introduced Zero Code

 a simple work code that highlights the key actions we must all take to protect ourselves and others from harm. It's aim is to focus attention on encouraging and developing correct and safe behaviours, and applies to everyone who works for and with Amey.

Here at Amey, we all take an active approach to health, safety and wellbeing. By making sure that we all play a part in looking after each other, we will achieve our goal of zero harm.



amey.co.uk in







Police have confirmed that two drivers have recently been convicted of motoring offences and have received a fine and penalty points on their license following incursions into road works that were captured by Carnell's award winning SafetyCam mobile road worker protection system.

Highways England's East Midlands Asset Delivery team requested the deployment of SafetyCam on a scheme on the A5 after reports of drivers failing to adhere to signed diversions and 'trying to drive the wrong way through traffic management closures. Incursions were subsequently recorded by SafetyCam, with evidence files fully submissible in a court of law, passed to the police to deal with in the appropriate manner.

As well as the two convictions, two other drivers are due to appear in court in March, one other has completed a driver improvement course, and one received a fixed penalty notice. Commenting on the use of SafetyCam on the A5, Highways England's Regional Director Catherine Brookes said "We were encouraged that the extensive trials of SafetyCam had shown a significant reduction in vehicle incursions and a noticeable increase in traffic compliance with road works speed limits. This gave us the confidence to adopt SafetyCam on this scheme, to give increased protection to road workers."

Safety Cam utilises two camera systems – one to monitor and report on the speeds of passing site traffic and one to record beginning to end submissible evidence of unauthorised vehicle incursions into road works.

The system is a proven solution to incursions and site vehicle speeding, due to its conspicuous appearance and ability to report poor driving through road works. The vehicle also acts as a fully resourced and functional site welfare vehicle available for use by the entire site team, thus also reducing congestion within the worksite.

It also has on-board Wi-Fi capability and is run by a dedicated SafetyCam operative who is fully trained in using the equipment and is responsible for capturing site speeding and unauthorised incursions, delivering daily reports to the client.

Road users entering our workplace is something we as an industry should not tolerate, and we need to continue combining education, enforcement and engineering to address this risk and change road user behaviour.



# Preventing public incursions. Protecting road workers.

More than 300 unauthorised public incursions into traffic management are reported every week on the Highways England network. SafetyCam significantly improves driver behaviour through road works, virtually eliminating incursions and providing a 50% month on month reduction in speeding site vehicles.



**FREE** DEMONSTRATIONS **AVAILABLE\*** 

# SAFETYCam

Mobile road worker protection system.

Instances of violations are captured using continuously recording HD video cameras combined with an ANPR camera, to provide beginning to end submissible evidence, captured on a watermarked hard-drive.

#### **FEATURES**

- > Front HD Video Camera
- > Speed Camera (Rear)
- > HD Video Camera (Rear)
- > ANPR System
- Cloud-based Data Capture
- On-board WiFi
- > Watermarked Hard Drive
- > Operator Workspace
- > Welfare Facilities

For more information or to book a free demonstration:

visit: carnellgroup.co.uk/safetycam email: mark.frost@carnellgroup.co.uk

\*Subject to availabilty



# ViewPoint

#### **Transforming Roadmarking Sector Safety**



Craig Williams, Health and Safety Director WJ Group ViewPoint is a guest column to allow senior decision makers in the highways sector to air issues they feel need further discussion.

Views are the author's own and not necessarily those of Safer Highways



The roadmarking sector has been delivering services in much the same way as we did decades ago.

More recently WJ's ambition and forward thinking ethos has driven a step change by continually finding better and most importantly, safer ways of working.

The roadmarking business is primarily, about road safety and we continually innovate high performance and durable markings to provide better and safer journeys for all road users. However, for the delivery of road marking schemes, whilst consideration for the safety of everyone is high priority, it is the safety and well-being of our workforce that has dominated our thinking.

There is nothing more important than ensuring everyone goes home safe

safe and well after each shift, so we have embedded safety into every facet of the WJ business as a core value. Operating in a high risk industry its important for us to use our mantra of 'good enough is 'just not good enough' and to make continual improvements in all we do a fundamental business principle.

A large proportion of our road marking delivery is on motorways and major A roads and in today's traffic conditions, the live carriageway of any highway is a very dangerous place to work. We are handling thermoplastic road marking material at 180 C and if the risk management of our processes and our behaviours was not challenging enough, we also need to be acutely aware of intentional or unintentional vehicle incursions into work areas.

Unfortunately, we know only too well the devastating consequences of unauthorised vehicles entering works and colliding with people and works vehicles. Our added concern is that, in recent years, overall injuries to the estimated 6,000 road maintenance workers has risen.

That in mind, it was incumbent on us, as the UK's leading road marking specialist, to take responsibility and commit to radically change the way we work in our sector.

Of course it's important to have a robust health and safety policy but to drive sustained and cultural change we must continually develop innovative ideas and provide new solutions.

WJ recognised some time ago that the most qualified group of people to provide ideas, for working practice safety improvements, were our own workforce. It was just a question of how we addressed behaviours and tapped into that rich vein of 'coal face' experience.

Training, operative awareness, collaboration, adopting best practice, influencing behaviours and innovation

all have a vital part to play in the process of establishing a holistic safety culture. The WJ training academy and commitment to LGV driver training has also been a significant factor, demonstrating a real commitment to address work related road risk for our workforce and all road users.

However, changes in our working practices did not even begin until we changed our thinking which has been achieved with the help of a behavioural psychologist, Professor Damian Hughes of 'Liquid Thinking'. In very simple terms, he explained how our brain works, why we behave as we do and how we can change our behaviours for the better.

that the most qualified group of people to provide ideas, for working practice safety improvements, were our own workforce

That cultural change for us, has been a continuing journey of understanding at all levels, addressing past attitudes and behaviours whilst developing new and safer methods of working. To that end we have established a strategy aligned with our workforce, our clients and other stakeholders. Using innovative and engaging techniques, good communication and regular feedback we constantly share a vision to make common sense, common practice.

All that said, safety developments and improvements in working methods are only part of the story.

We engaged with our clients, employed solicitors for mock trials, involved our supply chain and delivered a series of innovation events to place the road marking sector front and centre of





www.wj.uk

On the road to designing out risk.
Winning awards for safety - one of our core values.

WJ deliver road marking products and services nationally and regionally:

- High performance road markings
- Temporary markings
- Road studs
- Surface preparation
- Asphalt repair
- High friction & safety surfacing
- Specialist markings
- Hydroblast line removal
- Retexturing
- Average speed cameras
- Retroreflectometer surveys
- Thermoplastic equipment

#### WJ North Limited E: wjnorth@wj.uk

Stoke-on-Trent, Staffordshire. Tel: +44 (0)1782 381 780 Elland, West Yorkshire. Tel: +44 (0)1422 370 659

#### **WJ Scotland**

E: wjscotland@wj.uk Airdrie, North Lanarkshire. Tel: +44 (0)1236 755 114

#### **WJ South Limited**

E: wjsouth@wj.uk Milton Keynes. Tel: +44 (0)1908 649 110 London.

Tel: +44 (0)20 3553 4751 Braintree, Essex. Tel: +44 (0)1908 649 110

#### **WJ South West Limited**

E: wjsouthwest@wj.uk Wellington, Somerset. Tel: +44 (0)1823 289 950

#### **WJ Products Limited**

E: wjproducts@wj.uk Milton Keynes. Tel: +44 (0)1908 649 110 Bradford, West Yorkshire. Tel: +44 (0)1274 606 770

#### **Textureblast Limited**

E: info@textureblast.net W: www.textureblast.com Tel: +44 (0)1903 716 358 of the entire highways maintenance industry.

Early on our journey, we learnt to listen to all our stakeholders and understood that collaboration and collaborative learning were vital elements of our development. Safety can only be enhanced if we acknowledge and use our interdependence to drive the principals of collaboration through every level of our industry, and now with the support of the ISO 44001 collaborative working standard.

Early on our journey, we learnt to listen to all our stakeholders and understood that collaboration and collaborative learning were vital elements of our development

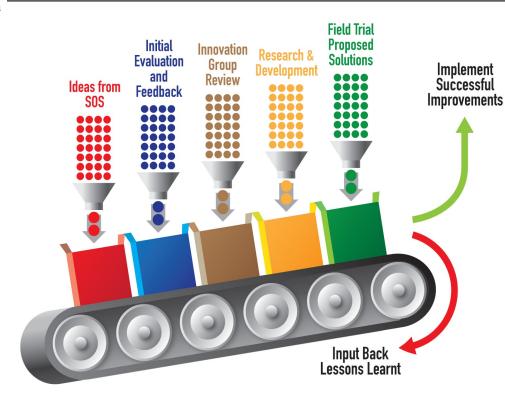
Further engagement was achieved through our corporate membership of the Road Safety Markings Association, Supply Chain Sustainability School, Collaborative Learning Circle, Institute of Highway Engineers, Chartered Institution of Highways & Transportation and the Highways Term Maintenance Association. Our commitment to the Fleet Operator Recognition Scheme, Business in the Community, Construction Logistics and Community Safety, Driving for Better Business and more all played their part in the overall cultural development of our organisation.

To manage the engagement with our workforce and other stakeholders we devised a systematic process, the "Williams Conveyor" supported by an email SOS WJ.UK system which has helped with feedback and now drives our research and development agenda and investment in innovative solutions.

The solutions identified have raised the bar in our sector through changes in methods, personal protective equipment and materials used. Our engineering division has also played a major role in managing, mitigating and eliminating risks with innovative designs on our vehicles and delivery methods.

A key focus has been 'automation of processes' to remove operatives from the carriageway and place them out of harm's way. This approach has helped manage the risks associated with people, plant interface, handling hot materials and of

### **WILLIAMS CONVEYOR**



WJ Group's Williams Conveyor

course the incursions into working areas.

The first move in this direction has been a new method for installing road studs. The bespoke design of the WJ Guardian system allows the complete road stud installation process to take place, whilst protecting operatives within an integrated safety cell of an 18-tonne truck.

The development has provided design engineers with the potential to eliminate a substantial number of road closures and reduce disruption whilst also improving the safety of workers and road users alike - which is good news!

That development was followed by the automatic conveyor for loading of boilers and then the automatic installation of temporary road studs. Although, perhaps a real indication of our direction and the future of road markings has been the introduction of the Robotic PreMarker.

Existing methods of pre-marking for road markings has not changed since its inception, it is a slow and labour-intensive activity. The process involves operatives or the client's engineers, calculating where the road markings should be, then walking the route with a measuring wheel and marking with aerosol paint.

Collaborating through one of our European partners WJ identified robotictechnology which has proved to be the fastest pre-marking robot in the world and was ideal for the task. It's completely autonomous, using a Global Navigation Satellite System for its navigation, and can mark out centre lines, arrows, lettering, hatching, numbers, car park bays and even logos.

The robot has been used on several projects so far to great effect, not only by eliminating safety risk but also by vastly increasing productivity. We are now proactively considering what else we can do with that technology.

WJ enthusiastically embrace and share the best work-related health and safety practice and we hope that many of our ideas will contribute to improvements across the highways industry.

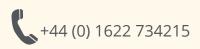
However, whilst the highway industry in general focuses on improving our working practices, it is hoped that we can also eventually influence driver behavior when passing by roadworks. Greater awareness, understanding and care would help keep both road users and our road workers safe -Now that would be a real achievement.

WJ will be showcasing their latest innovations in Roadmarking at this year's SH L!ve event to be held at Silverstone on 11|09|2019



# **Innovative Solutions** for a Safer Future











# Skanska - A journey towards becoming a learning organisation

Skanska has a great reporting culture, evolving over time and bringing

improve to our contracts. However, in 2017 the business concluded that focus on unique actions to prevent a reoccurrence, meant that the depth to which investigations were being undertaken was insufficient to identify underlying causation. As a result strategic opportunities to eliminate critical business risks were being missed and variations with investigation methodology, common on joint Venture and Alliance contracts, meant that our ability to analyse trends was compromised and therefore could not be used to develop strategies and interventions for the wider business

Skanska's evolution towards becoming an organisation that learns from unplanned acts and events, began in 2018 with an understanding from our current process before developing a strategic focus on measures needed to achieve a more successful outcome - our drive towards an Injury-Free Environment.

#### **Processes**

Skanska's aim was to improve the quality of investigations by developing

its processes and then to quarterly examine identified critical themes linked to the governance of the safety culture. Reviewing and subsequent updating of the accident investigation procedures did not require starting from a new blank page. Skanska's current process, established over time, is supported by formal skills based training for functional and operational staff that is based in Grounded Theory analysis.

Grounded Theory analysis is an academic methodology that seeks to establish a theory from gathered data. Its use enables Skanska to identify critical themes within a set of academically recognised areas of organisational failure, known as Basic Risk Factors. The process of coding these risk factors allows the examination of underlying causation with far greater academic authority, moving away from the traditional compliance based enquiries centred around the experiences, opinions and theories of the investigator. The result of this evolution is an accident investigation system that has enabled the identification of a divergence between personal values, attitudes or

## **SKANSKA**



Richard Hemingway Head of Health, Safety and Wellbeing; Skanska

expectations and the business safety culture.

Skanska's development as a learning organisation required subtle improvements. The first was to simply update our systems to include the forms completed reflecting the training our staff had received. The second was to introduce an Incident Review Panel (IRP) comprising the Heads of HSW within the business. The panel meets after each quarter and reviews the critical events for the previous period. Focus is given to the basic risk factors identified during the investigations and the reasons behind them. What the panel look for is commonality in the underlying causation that can be utilised to make improvements to the wider

Skanska's staff, partners and sometimes contractors are trained on Accident Investigation and Evidence Gathering by Kinaston Associates. Training is either two days for operational staff or four days for functional teams including HSW and Environment, who often perform the role of lead investigator.

One recent introduction that immediately proceeded the process

review was the identification of critical near miss events as Potential Fatalities. Skanska's reporting processes now focus on potential severity of all events and those with the highest level of potential are immediately escalated to business leaders and subject to maximum scrutiny through a full investigation. Reporting Potential Fatalities to business leaders within the monthly lagging indicators, assists with raising the profile of the highest potential incidents and helps to inform both tactical and strategic plans to prevent repeat events.

Key to any learning organisation is the capability to clearly and concisely communicate the lessons learnt from critical events. Skanska publish safety alerts that summarise the findings along with the good points and areas for improvement identified from incident investigation.

Skanska Group, the international business, dictates that knowledge shared from fatal injuries is cascaded through Global Safety Stand Downs to all employees and contractors alike.

#### **Outcomes**

Skanska sought to improve learning by embedding sufficient change across the business thus preventing

Key to any learning organisation is the capability to clearly and concisely communicate the lessons learnt from critical events.

reoccurrence. This was supported through briefings and workshops on the renewed purpose and updated process.

The output from the quarterly IRP is to identify necessary changes to achieve a better outcome for the business. These changes influence the Health, Safety and Wellbeing risk register that in turn shapes the management system policies and procedures. Recommendations from the IRP are tracked and reviewed at subsequent meetings, to monitor progress against successful delivery.

Recent proposed amendments to Skanska UK minimum HSWE standards include updates to; tool tethering requirements; material storage close to edge protection; and specification for taglines for lifting operations.

Skanska's journey as a learning organisation will continue to evolve through involving senior business leaders in the IRP. By collecting accurate data for reporting trends with underlying cause and by selecting some new leading measures to drive learning behaviours. This evolutionary approach to risk management demonstrates that it is actually revolutionary, to achieve success, through undertaking the well thought out strategic commitments rather than continuously generate operational actions with limited effectiveness.





# Training is an art, not just an education

Chris Tidy. **Technical and Training** Specialist, Centurion



V hat comes to mind when you think of personal protective equipment (PPE)? A hard hat? Safety boots? Perhaps a reflective vest? These are all forms of PPE which are readily easy to don, but all PPE requires extensive training and customisation for its use and compatibility to be fit for the risk it is there to prevent. of the entire highways maintenance industry.

Above-the-neck personal protective equipment (PPE) has been mandatory for certain tasks in industrial environments for some time, driven by the growing safety awareness worldwide. Workers are required to use different types of abovethe-neck PPE, such as head, ear, eye, and face protection together all at once. However, using different types of PPE that are incompatible with each other reduces compliance and workplace productivity.

Head protection probably has one of the highest wearer compliance rates (within the UK at least). However, despite high compliance and usage rates, there still remains some key unmet needs, offering scope for improvement. Head protection is required in numerous occupations across various industries; however, features and standards required for head protection vary significantly by application and user preference. Therefore, manufacturers of head protection are required to offer different product variants to meet the demands of various applications and environments. Whilst compliance is high, the knowledge of the correct products by application is still low, and without adequate training and education, we risk making key specification adjustments.

This is evidenced through continuous - What are helmets made of and are all research which highlights that head protection is at risk of commoditising. The phrase "a helmet is just a helmet isn't it mate" is used way too often in the UK, demonstrating that companies often default to the lowest cost solution, so long as it hits the standard. Indeed, the standards that govern head protection (EN 397) were written in the 1995, and adopted from ISO3873 in 1977, since then the modern working environment and available materials have changed significantly. As head protection prevents serious injury and death, it is not enough to simply meet standards but exceed certain aspects and to specify the right product.

We are starting to see enhanced levels of innovation in head protection - new materials, more demanding standards (like EN 12492, EN 14052), increased number of patented features and accessories. This will not alone eliminate the risks and accidents if people do not get enhanced levels of training to understand the issues and the importance of life saving protection and why exceeding the standards can save further lives.

- What are chinstraps there for and why, given their advantages, are they not far more prevalent?
- Should the helmet be vented or unvented?
- What can I do in certain weather environments to make sure the head protection still functions?
- What is the Kitemark?

- materials as strong?
- How do liners improve impact protection and why does that matter?
- How do I check that the helmet is still fit for purpose?
- What should people consider on compatibility of above-the-neck protection?
- What is available for high heat environments?
- How do I care for my safety helmet

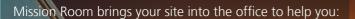
A key challenge for manufacturers is to provide the correct levels of training and education to support the varying applications, standards and product ranges. Training needs to increase in scale and depth across our industry. What a better place to focus on than head protection – a core symbol of PPE and the ultimate lifesaving equipment? Sub-standard or ill-specified products in this area will result in the most serious injury or even death. We need to increase the level of understanding for both company officers and wearers alike, to drive the correct use of compatible products, through a better understanding of the "what" is available and the "why" it is suitable.

The investment in training, through both provision and participation, is the responsibility of all in the PPE chain, from manufacturer, through distribution to the wearer.



# mission room

Improved for Safer Highways



## REDUCE MISTAKES **IMPROVE SAFETY** SAVE MONEY



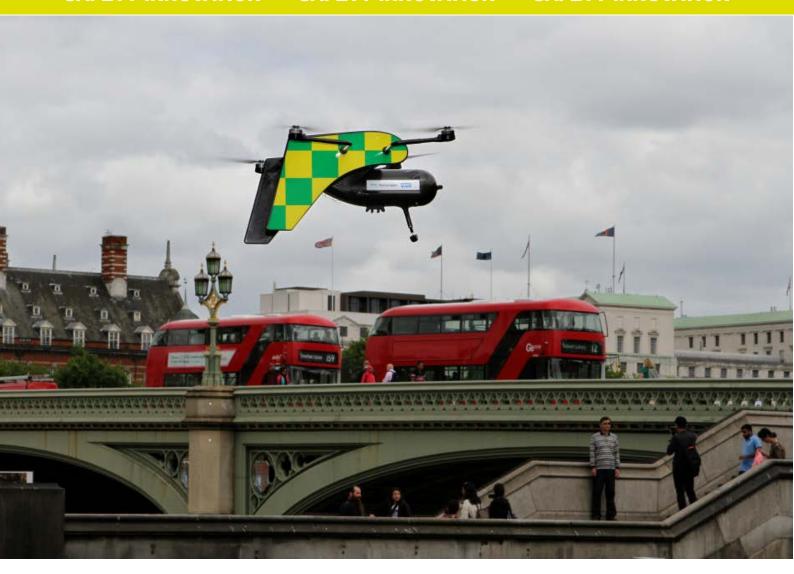
Proven on numerous projects including

M62 🏅 M1 - J39 📗 M27 🥇 M1 - J18 📗 M3 📗 M1 - A5 LINK

M5 - OLDBURY VIADUCT A6 MARR A14 UPGRADE

- BIDS AND TENDERS understand before you bid to reduce mistakes and identify opportunities
- STAKEHOLDER ENGAGEMENT explain things better to lay-people reduce misunderstanding
- SITE INDUCTIONS sub contractors quicker, more effective and safer
- OPERATIONAL PLANNING understand problems and produce better solutions
- PROOF OF WORKS streamline claims and improve cashflow
- PROJECT MONITORING keeping parties up to date with progress
- DILAPIDATION SURVEYS proof of site state before project starts reduce end of project conflict costs
- EARLY CONTRACTOR INVOLVEMENT (ECI) smooth communication between client, designer and contractor





# The future for drones is further than the eye can see



Mike Kehoe Principal ITS Engineer Amey Consulting

ameyconsulting

Not long ago, the idea of self-driving vehicles was the domain of science fiction. Now, sidewalk delivery robots and autonomous cars are science fact. As the capabilities of drones like AmeyVTOL's Flying Wing expand exponentially, how do we help society keep up? Principal ITS Engineer Mike Kehoe mulls it over.

Technology is developing at a rate not seen since the industrial revolution and, for some, it's a bit scary. For every clarion call to embrace it more, there is another voice urging caution and restraint.

Caution is certainly necessary. The regulatory and societal protections we rely on, and which evolved over decades of relative stability, need to keep up the pace to stay effective.

## Addressing regulation in the right way.

As technology becomes more ubiquitous and powerful, authorities are being rightly challenged over its safe use in the public space – whether it's self-driving vehicles on public roads or the influence of 'big data' in our democratic processes.

It's in all our interests that regulators and legislators make the right decisions to manage the disruptive impacts of technology without restricting its immeasurable promise. And this is something where industry and tech developers can play a key role.

As joint developers with VTOL Technologies of one of the UK's most advanced drones, The Flying Wing, we

are actively pushing at the frontiers of regulation and the comfort zones of stakeholders to help us realise its potential.

Unmanned aerial vehicle (UAV) technology could soon perform critical services from transporting urgent medical supplies to bridge inspection and repair, with benefits for productivity, transport congestion and the environment.

#### A Safer Way to Survey

The Flying Wing's ability to deliver precise geospatial survey data in real time at distances of up to 100km makes it safer, quicker and easier to survey and assess vital civil infrastructure and could transform the field of asset management.

Plus, every time a fully-equipped drone is sent into a tunnel, gaseous atmosphere, high-level structure or the embankment of a live rail or road network, someone is removed from risk.

#### 'Line of sight' is the key

But right now, advanced UAVs like AmeyVTOL's are affected by the same rules which apply to the drones you or I could buy on a petrol station forecourt. Specifically, the rules limiting their use to within the line of sight of whoever is operating it.

Overcoming natural safety concerns about drone operations, especially near aviation sites or other hazardous environments, means getting consensus from a broad section of stakeholders.

From a regulatory point of view, licensing drones to operate beyond visual line of sight (BVLOS) is the Rubicon this technology needs to cross.

Through our work developing concepts for our clients, we are already liaising directly with the regulator the Civil Aviation Authority (CAA). Specifically, we are looking at the necessary processes and regulatory requirements for using advanced BVLOS drones like AmeyVTOL's to manage incidents and last mile delivery on smart motorways.

The separate but linked challenge of getting buy-in from stakeholders is being tackled head-on in cities across the UK by the Flying High Challenge; a project led by innovation foundation Nesta and the Government's innovation agency Innovate UK.

#### **Exciting project in the West Midlands**

Amey is one of the Flying High partners in the West Midlands and we will be working with city leaders, regulators, public services and other businesses over the next few months to look at the potential for drones and how they could be integrated safely and sustainably into communities.

By taking account of real-world conditions and using live demonstrations, this exciting project is exactly how we will start to build a consensus as a society.

Only by understanding stakeholders' aspirations, educating them to the possibilities and building the necessary assurances will we be able to navigate this technology through the complexities of issues like the law, regulations, safety and privacy.



# Empowering the individual is key to success

#### **Martin Worthington**

SHEQ Director, Morgan Sindall Construction and Infrastructure and Vice Chairman of Safer Highways



Ibelieve the key to successfully delivring a safe highways project

is by fostering a sense community and trust amongst the whole team, and ensuring everyone on site – from operational lead to the smallest subcontractor – feels empowered to make a difference.

On any sized project, it is possible for an individual or team to underestimate their own importance to its ultimate success, and for other members of staff not to appreciate how pivotal each of their colleagues is to its efficient day to day running when creating a safe environment.

If a member of the team is relatively new, or doesn't work in a 'senior' role, they may not feel confident enough to speak out if they see activity taking place which they perceive as being an unsafe action or condition.

When working on a project, it can perhaps be intimidating to be the one person to put their hand up and say that something doesn't look or feel right.

In order to counter this, we use a number of techniques, including the recent introduction of 'Safety Empowerment Cards' on a pilot site. This provides every worker on site – whatever their job title or length of service – with the ability to halt an operation that they think is unsafe or has the potential to put colleagues at risk.

This is a simple but effective way of instilling responsibility and power into the individual. While the cards have only been used on one site to date, their success means we are currently looking into rolling them out at projects across the country. We have found that the Safety Empowerment Cards are a great way of showing new recruits that they are trusted members of the team.

When people start a new job, it is vital for both employer and employee to make a good impression, as this will set the scene for the future working relationship a good impression, as this will set the scene for the future working relationship. One innovation we've implemented is he translation of our induction boards and signage into languages such as Punjabi, Romanian and Polish. On some projects information can also be accessed through a QR code on the boards, and we are considering rolling this out on a wider basis. While this may seem an obvious use of existing technology, it has not previously been implemented in this way and it has proved invaluable both in providing a warm welcome to new members of the team, and to impart essential details about health and safety. Other documents and videos are also translated where appropriate, and we have similarly created stickers for workers to wear identifying themselves as able to translate certain languages if required. We have also made good progress in increasing the use of graphics rather than the written word in on site literature – another simple but effective way of enhancing awareness of safety risks.

We have found that the Safety Empowerment Cards are a

great way of showing new recruits that they are trusted members of a team

We also use QR codes for easy access to our Positive Intervention app which allows any individual to feedback on good practices or areas for improvement. This means we are able to receive input by our own employees, supply chain and other individuals who contribute to the sites day to day running.

Empowering the individual is key to staying safe, and activities like those previously described are instrumental to letting staff know that their voices will be heard and ideas or concerns acted upon.

Another way we instil this in our operations is through our Views of Operatives in the Construction Environment initiative – also known as VOICE.

This is a feedback tool we've developed over many years that is aimed at ensuring everyone on site feels they have a real input into the day to day operations. VOICE sessions take the form of relaxed get-togethers on site rather than in a boardroom, which we feel provides a more relaxed environment to make people more confident to voice their opinions. During the VOICE sessions, the agendas and resulting outputs are set by the nominated reps, meaning the items discussed and acted upon are driven by the staff. The agreed outputs are then published on "You said - We did" boards across the site in question to ensure everyone is aware of what action has been

Another way we instil this in our operations is through our Views of Operatives in the Construction Environment initiative – also known as VOICE.

Historically, some organisations have paid lip service to employee involvement and engagement but for us it is an essential tool to improve safety and the ultimate quality of the projects we deliver. As a result of VOICE feedback, we have made various adjustments to our operations, including things as specific as improved head torches, to increasing the number of mental health first aiders; as well as introducing wellbeing additions such as providing vending machines, installing more cycle bays and helping community projects.

A big part of our ongoing improvement over the last few years has been the further refinement of our senior management engagement and the introduction of engagement discussions that use themed 'grab cards', which are delivered in the field and provoke healthy debate. The idea of the engagement discussions was informed by guidance from our operatives and supply chain teams, who advised people felt a lot more comfortable and at ease having discussions on their own patch. A wide range of issued have been discussed during these sessions, including risk perception, mental health



and the people plant interface. Our teams have risen to the responsibility we've given them to help improve safety on site, and it is important to recognise their continued contributions. Individuals whose commitment to health and safety goes above and beyond are rewarded with a monthly cash prize and donation to a charity of their choice, while there are on the spot canteen vouchers handed out as immediate recognition for exemplary behaviour. While our approach to safety incorporates new technology and advanced thinking, it would be remiss to overlook the continued power of a genuine thank you.

A number of years ago I was also extremely proud of being involved with the development of the HSE Leadership and Worker Involvement Toolkit (LWIT). Its creation was informed by a lot of research and learning from key industry figures – its use at Morgan

Sindall Construction & Infrastructure has had a very positive impact on our work and I would encourage my colleagues across the industry to include it in their own health and safety provisions and promote it within their supply chains, especially given the amount of advice and free resources in there.

We have found that the Safety Empowerment Cards are a great way of showing new recruits that they are trusted members of a team

Everything that I've described has been an important change that improved both safety on site as well as the service we are delivering to our customer, and we continue to encourage our teams to keep us updated on any further interventions that may be required. individual's opinion is valued and

listened to.

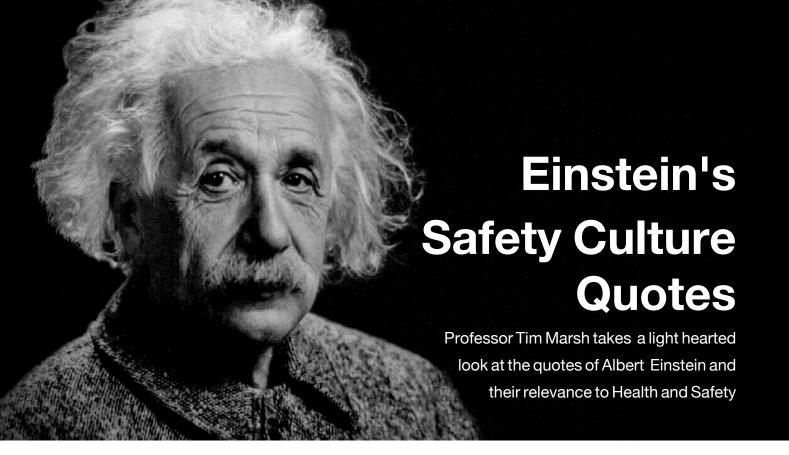
Highways projects are often vast undertakings that rely on hundreds of workers across different shift patterns,

Our teams have risen to the responsibility we've given them to help improve safety on site.

and it is ultimately the collective team effort that will result in a safe and successful project – but what drives the team forward is the knowledge that each individual's opinion is valued and listened to.

## MORGAN SINDALL

**INFRASTRUCTURE** 



Exactly how clever was Albert Einstein?
Well, in 2017 his prediction, made in a Viennese shed using paper and pencil 100 years ago, that time itself could be warped by a black hole was proved true. I often say in lectures that the human brain is the most sophisticated bit of kit in the universe by a country mile – and this alone proves that point! (It's when this power backfires or gets pointed in the wrong direction that the problems start).

Einstein seems also to have had a quote for every occasion with many related to "kissing pretty women" even when talking about his theory of relativity: Namely: "to a man kissing a pretty woman 1 minute can seems like seconds but put his hand in a fire then 5 seconds seem like minutes". He also quipped that you can kiss a pretty woman whilst driving but "you're simply not giving the kiss the attention it deserves".

It's worth risking these non PC quotes to establish that as well as a genius physicist he was a very human, indeed humane, man - and if we can't learn from a humane genius who can we learn from? He really did talk a lot of sense about a lot of subjects. Everyone knows about this first quote

#### "Genius is 10% inspiration but 90% perspiration".

A great reminder of the principle that we tend to get the luck our efforts deserve as so entertainingly described in Matthew Syed's book "Bounce" and known to most safety professionals as the Heinrich principle. Interestingly, Einstein didn't say this first, Thomas Edison did, but it's a lovely illustration of a classic thinking error: when you see that word 'genius' you can't help but automatically think 'Einstein!' as they have become synonymous.

He did however have things to say about Dekker's new view of human error and mistaken thinking; exhortations to quality dialogue and Reason's 'balance' view of risk management as well as the vital importance of front-line

behavioral safety teams. Well, that's what I'm claiming here anyway – starting with his views on the importance of objective and analytical learning.

"A man should look for what is, and not for what he thinks should be".

and

"Education is not the learning of facts, it's rather the training of the mind to think".

The recent Nobel Prize winning book "thinking fast, thinking slow" describes how we all assume that the logical part of our brain controls the reptilian or back brain (or 'chimp' brain to quote Steve Peter's best-selling book the Chimp Paradox). In truth, however, the back (instinctive) brain has far more control than we realise. In discussion of this topic with a senior MOD psychologist recently he summed this up perfectly with the observation. "So we think its decision making based on facts ... but often its fact selection or even creation based on emotive decisions". Typically, this isn't conscious and Machiavellian (see Bush, Cheney and cherry picked intelligence about WMDs etc.) but subconscious and applied to all sorts of everyday risk factors – like sub-contractors.

The Anker and Marsh model of safety culture suggests that once diminishing return have been reached with systems and process then it's all about two things: transformational (not transactional) leadership and learning with, as a law of nature, the quality of our learning being necessarily limited by the objectivity of our analysis. (Unless we get lucky – but as above, over time, luck evens out).

Similarly, our attitude to learning needs to reflect the fact that much learning is based on trial and error.

The most successful jockey of all time Tony McCoy (more than 4,000 winners) also holds the record for

the most losses (14,000 plus) and – most probably - broken bones too. (Having broken just about everything and many bones several times). A really wonderful book is Matthew Syed's 'Black Box Thinking' which quotes Sidney Dekker on Just Culture and which stressed that entire societies move forward fastest when they have a pro-active and learning based approach to life's travails.

Andrew Hopkins' 'Mindful' Safety culture covers similar ground

In the world of well-being the quote 'what doesn't kill you (can) make you stronger (with the right mind-set)' is relevant here. Although Einstein didn't say that he did say the following:

"A person who never made a mistake never tried anything new. Life is like riding a bicycle. To keep your balance you must keep moving".

"In the middle of difficulty lies opportunity"

"Once you stop learning, you start dying".

"It's not that I'm so smart, it's just that I stay with problems longer". (Probably just after quoting Edison!)

But my favourite sums up the need for balance and proportionality and beautifully reflects Reasons' overstretched elastic band model of balanced risk:

"A ship is always safe at shore but that is not what it's built for".

For me this is even better than the quote that "you cannot fall if you do not fly... but what is a life without flight?" that adorns so many office and gym walls.

In recent years we're seen a move towards demystifying safety, speaking plainly (or using illustrative stories) and focusing on what's most important with fewer but better rules in an attempt to facilitate better quality dialogue. Again, Einstein would have approved:

**SAFER HIGHWAYS MAGAZINE 2019 Q1** 

"Any ... fool can make things bigger and more complex ... it takes ... courage to move in the opposite direction"

#### **Finally – Behavioural Safety**

Perhaps the very best behavioural methodology of them all is to set up a front line project team trained in ABC or consequence analysis, Reason' Cheese model, Just Culture and Five Whys analysis and a few other basics. Once trained then set them off saying 'you know what you and your colleagues are tempted to do, why they are tempted and what to do to design out that temptation ... please fill in this high impact low cost box'

This because basically, the people who do the job are the experts and the more they can be involve in the analysis described above the better. As well as accurate analysis it promotes empowerment, trust and ownership and, of course, our man Albert had a colourful quote that illustrates the point.

"Everybody is a genius. But if you judge a fish by its ability to climb a tree, it will live its whole life believing that it is stupid"

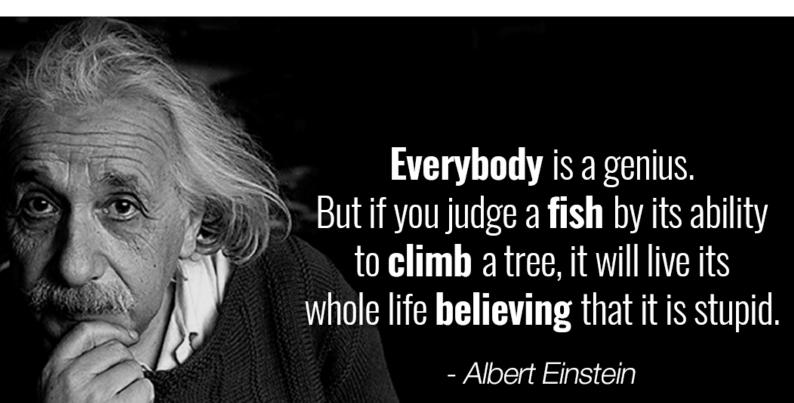
Finally, two quotes that show Einstein would have been squarely at home in the midst of the SHW community.

"Not everything that can be counted counts, and not everything that counts can be counted" and

"Concern for man and his fate must always form the chief interest of all technical endeavours".

Albert Einstein, genius, humanitarian, lady's man ... budding HS&W professional!

This article first appeared on SHP
Online
www.shponline.co.uk



## **SPOTLIGHT:**

# Wellbeing

The theme for the 2019 Safer Highways programme is wellbeing, with a particular focus on mental health. In this issue of the magazine, we look at some of the key challenges facing employers.



### Mind Matters -Jacobs take on Mental Health



**Glen Ridgway**Global Wellbeing Director - Jacobs

# Managing fatigue - A business critical issue



Clare Forshaw
Health Partner -Park HS

# Age and work – do we care enough?



Tricia O'Neill
UK Head of Occupational
Health & Wellbeing and
H&S Education and
Competence, Skanska UK

### Leading on Workplace Health – the Whole Picture



Steve Perkins
Steve Perkins MA Oxf
CDir FloD FlnstP
Managing Director of
Steve Perkins
Associates Limited



# Promoting wellbeing through positive mental health



Glen Ridgway Global Wellbeing Director - Jacobs

As the theme for the 2019 'Safer Highways' programme is wellbeing and mental health, Jacobs highlight Mental Health Matters, the company's Mental Health programme in the UK and beyond.

At Jacobs we have a strong commitment to health, safety and welfare. Our safety programme, BeyondZero, engages with all staff to make safety a personal value that we live by every day. Jacobs' safety culture extends outside the office walls, beyond the project or client site and into our travel, homes and communities. The promotion of mental health in the workplace is a natural extension of this culture, helping our staff understand, protect and sustain their mental wellbeing. To support this, we launched our mental health matters strategy in 2016.

#### Mental Health Matters Strategy

We believe our people's mental health is as important as their physical health. We recognise that work and life can be challenging and that for some of us that can include some form of mental ill health. We will destigmatize mental illness by making it part of our everyday conversations, every day. Our aim is to create a working environment where everyone can thrive. An environment that promotes positive mental health and wellbeing, enables people to be confident, effective and decisive and allows them to reach their full potential knowing that mental illness is not a barrier. This

best version of themselves on any given day.

There are three main themes which are key to creating a culture where everyone can thrive:

- •Training and awareness 'normalising' conversations about mental health is the key to allowing staff with concerns to seek appropriate help, recover more quickly and to reduce the risk of these concerns developing into disabling mental illness.
- •Building resilience based on five ways to wellbeing, this builds on the programme of wellbeing events and engagement that is already in place through BeyondZero.
- •Improved support systems includes the provision of professional help (e.g. our employee assistance programme) as well as improved absence recording and reporting systems to monitor the long-term success of the strategy.

#### **Positive Mental Health Champions**

Fundamental to the success of the strategy is our network of positive mental health champions. Our champions are employees who are empowered to help Jacobs create the mentally healthy workplace we are aiming for by working with other champions and local management to identify and



# **JACOBS**

# Mental Health Matters

Promoting positive health and wellbeing in everything we do







www.jacobs.com | worldwide

mental health matters

address mental health concerns at a local level.

Positive mental health champions promote our mental health matters strategy, support fellow employees and encourage positive mental health throughout the workplace. They are also available for staff to talk to and are trained to direct staff to appropriate professional health care when necessary.

#### Positive mental health

Our champions are making a difference in fundamental ways - from everyday 'get it off my chest' discussions, to conversations that have saved lives and prevented suicide attempts. The network of champions began in the UK in 2016, training 120 staff. We developed robust selection criteria and now have champions from graduates to directors of operations. As of January 2019, our network has grown to almost 1,300 champions in 28 countries across 6 continents. Positive mental health champions develop local awareness raising programmes that meet the needs of their location.

#### We will destigmatize mental illness by making it part of our everyday conversations, every day.

Whilst at a national level we have some core events that we ask them to promote such as World Mental Health Day, the day-to-day programmes are developed by the local champions. This way the messages are relevant to the staff receiving them and are more successful as a result. Since launching our mental health matters strategy in 2016 results include:

- An increase in the use of our employee assistance programme from 2.0 per cent to 4.5 per cent. The average use for a company of our size and in our industry is 2.2 per cent.
- A safety observation report procedure, which allows staff to report unsafe acts and near misses, includes stress and mental health as a category. Since this addition, we have seen a steadily increasing number of reports on the system.
- Achieving Gold Standard in the MIND Workplace Wellbeing Awards in 2018
- Being recognised across the industry with several awards, including Mind Workplace Wellbeing Index Gold Award 2108, New Civil Engineer (NCE) 100 Health and Wellbeing Leader of the Year 2018 and Construction News Health, Safety and Wellbeing Excellence (Company) 2018 Award. Our mental health matters strategy demonstrates what can be achieved with the full support and commitment of our senior leadership, a strong and consistent narrative, dedicated and passionate individuals, and a relentless focus on delivery.

#### **Beyond Zero**

BeyondZero is at the centre of our culture of caring, and runs through our entire company, the companies we do business with and our families. We celebrated 10 years of BeyondZero in 2017 and it is now part of our DNA.

The BeyondZero programme was created in response to a tragic event. On 23 March 2005, an explosion in an oil refinery in Texas killed 15 people and injured 180 - eleven of

the fatalities were Jacobs employees. From this moment, Jacobs understood that unsafe activities and attitudes could not be tolerated at any level.

We had to ensure that safety was a personal value of all employees and in 2007, BeyondZero was created.

BeyondZero is first and foremost a mindset for us to work in safe environments and leave happy and healthy at the end of each day. BeyondZero has led to a cultural shift in Jacobs. This has taken a great deal of time and effort but the relentless commitment and engagement from our executive leadership team kept the company focused on delivering the aims of the programme.

Our champions are making a difference in fundamental ways - from everyday 'get it off my chest' discussions, to conversations that have saved lives and prevented suicide attempts.

The true power of BeyondZero is getting people to an understand the wider consequences of an accident; on them as individual, on their friends and colleagues, but more importantly on their family. By recognising the potential impacts of unsafe acts and behaviours, we empower people to care for each other. Our people are encouraged to speak up when they feel uncomfortable, knowing that they will have the full support of their leaders.

#### **JACOBS**







## The ultimate smart hearing solution

3M™ PELTOR™ LiteCom Plus Headsets

With LiteCom headsets, communicating on noisy job sites has been made easy and safe. LiteCom is a tough and rugged headset designed to cope with demanding use in many different working environments. The built-in two-way radio lets you talk hands-free and work safely regardless of harmful noise levels.



To find out which headset is for you or request contact from a 3M representative visit: **go.3M.com/smarthearing** 

# ViewPoint

ViewPoint is a guest column to allow senior decision makers in the highways sector to air issues they feel need further discussion.

Views are the author's own and not necessarily those of Safer Highways

This issue's ViewPoint on effectively dealing with an aeging workforce comes from Tricia O'Neill, UK Head of Occupational Health & Wellbeing and H&S Education and Competence, at Skanska UK plc



A person's 'workability' depends on many factors such as their health and functional capacity (physical and mental), competence, their values and attitudes, motivation, work demands, people they work with and how they are managed as well as the work environment. Age is just another dimension.

There is a culture and perhaps a mindset that in UK plc that workers over a certain age are not interested in developing new skills, trying new roles and are basically winding down. How wrong they are. People stay in the workplace much longer than previous generations sometimes it is due to financial reasons such as lack of pension arrangements but increasingly it is because work provides a sense of purpose and community that people want to stay connected as long as possible and basically belong to a community.

This is good for people's mental wellbeing and self-esteem – which has significant benefits for the UK economy, as they are less likely to require as much health or social care or state benefits.

The typical age of a worker in construction is 45+ years and the over 60-year-olds have increased more than any other age group in the past decade. So we have a workforce that knows their job really well, have a work hardened capacity and performance but the reality is that they will have a decreasing physiological impairment as their working life extends.

#### So what else is affecting the ageing workforce?

- 47% are aged 45 years and older
- 6% are male
- 20% will leave before state pension age (66 years old)
- 23% of those aged between 50-64 years old, report 2 or more long term health conditions[3]
- Whilst those between 45-64 years feel that job security has decreased between 5-15% in the past decade

But work is good for us, good for the business, good for the industry and good for the economy but there are significant factors in the macro-environment that play a role in the decision of the worker to stay in the workforce later in life. Changes to public policy, industry standards and ways of working are as much a part of the solution as a part of the problem.

## So what about the health and safety implications and the ageing worker?

As we age many of our body systems will not work as efficiently – visual acuity, hearing, musculoskeletal system, cardiovascular system and our cognitive/processing ability. Although chronological age is not an accurate indicator of physical condition/capability, many of which can be affected by lifestyle choices, and from a workplace perspective, we need to be cognisant of the health and safety implications of

#### **Our Ageing Workforce**

47% of the workforce are aged 45 years and older

6% aremale

20% will leave before state pension age (66 years old)

23% aged 50+ report 2 or more long term health issues Over 45's- feel that job security has decreased 15% in the past decade





these changes. Chronic illnesses are more common (23%) of 50-64-year-olds reporting two or more long term health conditions and 25% of these workers are considering stopping work because of their poor health. Many of these long term conditions will be treated with prescription medicines and the adverse side effects such as drowsiness, dizziness may require role adjustments, shift changes and assessment of cognitive demands. So, how do we manage these risks in the workplace?

## Alongside this common scenario, there are 4 other health, safety and wellbeing areas that need consideration.

- Physical work capacity changes.
- Muscle power. There is a reduction in strength, endurance, flexibility and power which increases the likelihood of musculoskeletal conditions occurring.
- Hearing. Reduction in acuity means that alarms and instructions may be missed or not heard.
- Vision. Improved lighting may be required or larger print. Regular eyesight test and peripheral vision checks are recommended.

#### Mental health and wellbeing.

Our thinking becomes crystallized vs. fluid, which means we work best with familiar tasks and processes. New requirements may take longer to embed and to do with speed and accuracy.

There are more men living alone than women so the workplace is often considered as a place where they have a sense of belonging and have regular social contact with others, both of these factors are material to good mental wellbeing. This may be of particular relevance given that in construction sector 87.6% are men and 47% of these with an average age of 45 years and older.

Half of the adults aged 55 years and older have experience mental health issues. (Age UK, 2017).

Men over the age of 40 are more at risk of suicide in the construction industry and lower-skilled workers are 3.7 times more likely to die as a result of suicide. Living alone

without social networks can contribute to the feeling of

The nature of the construction industry often means workers are living away from home for long periods of time away from their social support, family and healthcare professionals. Maintaining good medication/treatment can be difficult if they are unaware of how to access local GP services.

#### Work hours and sleep pattern change.

As we age we are less able to cope with shift work and become more of a 'morning' person. So fixed shifts or fast forward rotating shifts work best.

Additionally, the ability to work full-time hours declines so flexible or reduced hours will help maintain productivity. There is new evidence to suggest that long term sleep debt (over many years) is a precursor to dementia and cognitive impairment, a consideration for those workers who have always done nights or shift work who work on road networks.

#### Lifestyle choices and welfare.

Providing good canteen/welfare facilities so that workers can access hot food – particularly breakfast and one hot meal mid-shift can make a difference to performance. Those arranging welfare facilities need to be cognisant that some workers will live in 'lodgings' and may not have the facility to cook or get food. They will typically opt for convenience food thus increasing the likelihood of weight issues and subsequent musculoskeletal issues.

Metabolism slows down so our need for the amount of food decreases but our food choices remain the same leading to weight gain. The effect of this not only increase risk of musculoskeletal injuries but also long term health problems such as heart disease or diabetes

Additionally, the lack of exercise (which is different from the work activities) means individuals work performance may be affected as well as increased likelihood of injury. Long term project should consider how recreational exercise can be accommodated.

## So commercials aside what should, could or would we consider doing?

There is definitely a lot of rhetoric being shared about the ageing workforce but it is not new. Nor seemingly, is there a plan of action.

We need to think about '...the sum of the whole...' not just the parts – and it needs an approach that is cognisant that the workforce we rely upon, is shrinking and is getting less productive, naturally.

There are 4 areas that could make a difference:

#### Age Management approach

Increase the awareness and knowledge around the impact of age on work across the sector/business. Build the line manager's capability to support employees with age-related issue and how to adjust the work activities to match the employee capabilities.

Do you offer part-time work/shortened hours for all including those at project level? If not why not – many industries offer a 'step back' role or hours as people age it enables the business to retain the skills and knowledge they have invested and meets the decreasing tolerance and pace of work activities of the ageing individual. Could the construction sector do the same – would need a different mindset?

Ensure your fatigue policy limits the working week – research tells us that people are no more productive working if they work 55 hours+ a week[7].

Design out health risks. Particular emphasis on manual handling given musculoskeletal power and endurance are reducing year on year as we age. This means the commercial and operations teams need to be cognisant and realistic about the resource requirements for projects factoring in the reducing performance and productivity of the age of their workforce.

#### Financial planning

More work and research is needed to understand what needs to be put in place for construction workers to plan their pension and post-working life, including the education of workers. Trade bodies can play a key role in this programme.

#### Matching job activities to individual capability

Adopt a physical demands analysis By understanding the work activity requirements you can then match with individual's functional capabilities, leading to fewer injuries and ill health.

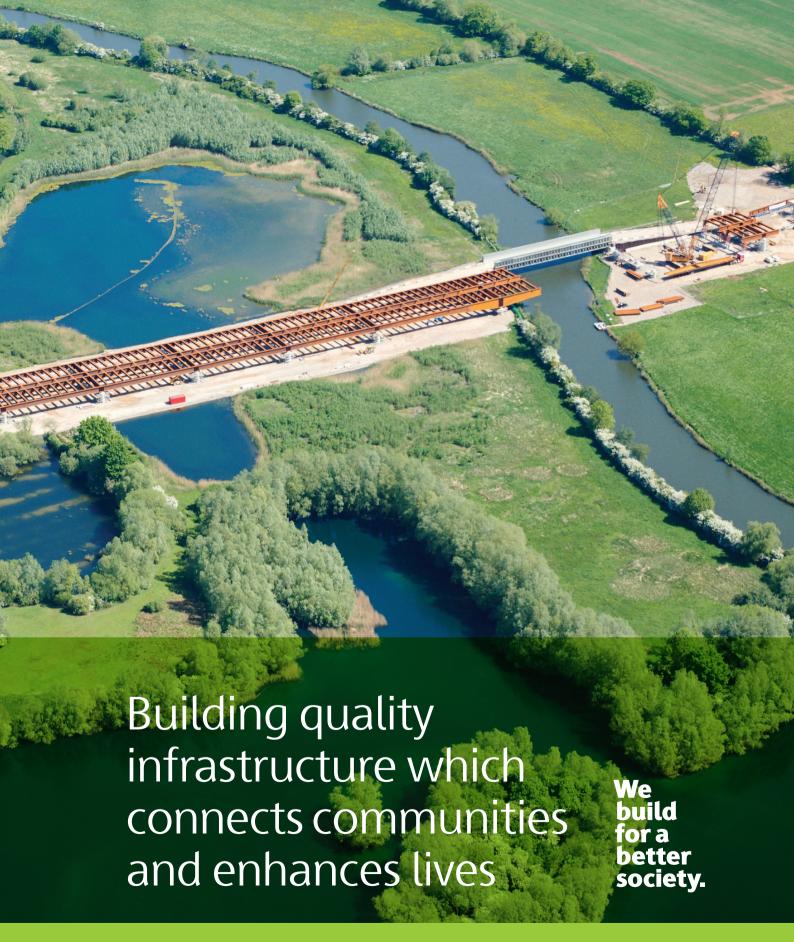
Where there are concerns about employee's capability to undertake their usual work introduce functional capacity assessments to establish functional ability rather than being led by a diagnosis.

#### Welfare

Offer an age-specific health assessment focused on key areas of physiological changes – eyesight, musculoskeletal, hearing, cognition .

With peripatetic workforce consider ways for them to access GP care such as technology-enabled services such as PushDoctor. This may provide assurance that the individual's conditions and medications are being managed. Good diet and nutrition is key to performance and productivity. So ensuring the catering contract provides the right balance of nutrients to increase performance. Whatever age we are we all need to feel valued for our contribution but so often in the workplace, we are defined by what we can (or can't) do, your intrinsic value to the community/workplace. Work is good for people, industry and the UK economy – but unless we actively rethink our approach to our (ageing) workforce we run the risk of easing out valuable people from business and society as a whole.







# Safer Highways Unveil Mental Health Summit

As part of its Road to Wellbeing Strategy, Safer highways have announced it is to host the first ever sector specific mental health summit.

Safer Highways have announced that this year's Mental Health Summit will take place at the House of Commons on 20th June 2019.

Chaired by **Karl Simons**, Chief Health, Safety & Security Officer at Thames Water and with **Lord Dennis Stevenson** as Keynote speaker, the event really is a must attend for anyone involved in the improvement of Mental Health and Wellbeing across our sector.

The event will form the launch pad for our industry-wide "Road to Better Wellbeing" strategy, designed to increase the awareness of wellbeing and mental health across the sector irrespective of the size of organisation and will also act as the public unveiling of the accompanying 'Road to Better Wellbeing' survey.

The key aim of the survey is to act as a benchmarking exercise of industry's implementation of the recommendations of the Stevenson Farmer "Thriving at Work' report; thus for the first time enabling our sector to become leaders in how we form an approach to tackling mental health.

THE ROAD TO BETTER

WELLBEING is an approach and set of ideals for delivering occupational health within the Highways Sector, solely aimed at providing board statements under strategic delivery headings which organisations who sign up to the Road to Better Wellbeing approach can achieve using their own processes and procedures.

The aim of the 'Road to Better Wellbeing' programme is not to be prescriptive and determine which, if any, pre-existing existing awareness and training programmes organisations should or should not use.

Instead, our aim is to enable employers to adopt various methods of awareness and training within a specific framework to enable them to develop a cohesive and effective message around health and wellbeing. To make this process available to all, a series of free to access resources will be produced and a clearly defined pathway identified.

In doing this we hope to achieve our objective of significantly improving Health and Wellbeing across the sector. At the same time, we also will be working with the Tier 1 contractors enable them to cascade processes for the management of Mental Health and Wellbeing down through their supply chain.



# Leading on Workplace Health – the Whole Picture





**Steve Perkins** *Managing Director of Steve Perkins Associates Limited* 

Steve Perkins MA Oxf CDir FloD FlnstP is an Executive Coach and Consultant working globally in the EHS field.

the former CEO of BOHS – the Chartered Society for Worker Health Protection. Steve helps business and EHS leaders develop and improve their organisational strategy and culture and grow their personal leadership. With health and wellbeing now firmly on the agenda it is time to adopt a strategic approach based on proper risk management - says Steve Perkins

With health and wellbeing now firmly on the agenda it is time to adopt a strategic approach based on proper risk management.

We talk about 'Health & Safety', but the truth is for decades what we've really meant by that is just safety. One hundred years ago UK business killed 5,000 workers every year from accidents. Now it's down to less than 150. Still too many, but an achievement we should be proud of nevertheless. Of course, safety isn't 'sorted' and we can't take our eyes off the safety ball.

However, in the UK today, total work-related deaths stand at 13,000 per annum. So only 1% of all those fatalities are due to accidents. 99% are due to non-communicable disease

caused by exposures in the workplace. Some 12,000 of that 13,000 are lung related; things like cancers and COPD[1].

Only 1% of all workplace fatalities are due to accidents. 99% are due to non-communicable disease.

These ill-health deaths are only those estimated to be directly due to occupational exposures. There are many more deaths attributable to other factors, where workplace exposures have played a part. But these are not included in HSE's figures.

Of course, there's also the bigger

picture of morbidity not just mortality. The UK loses 31 million working daysdue to work-related sickness absence each year. Of that 26.7 million days are due to work-related ill-health. That's 86% due to health – not safety. The annual cost to the economy is £15 billion a year, of which £10 billion is due to ill-health. And that figure doesn't even include the cost of the long latency diseases.

So what about the construction industry's part in this ill-health, disease and death? Annually 3,500 construction workers die from work-related cancer and each year there are another 5,500 new cases.

At any one time there are 80,000 construction workers with work-related ill-health. In an industry where recruitment and retention are becoming increasingly challenging this is not a good picture economically, never mind morally.

In the highways sector there are many types of toxic exposures; respirable crystalline silica causing silicosis, lung cancer & COPD; welding fumes from steels work causing pneumonia, asthma and cancers; isocyanates and VOCs in solvent fumes causing asthma, dermatitis and damage to the liver, kidney and central nervous system; bitumen which causes a variety of respiratory diseases and cancers.

## The annual cost to the economy is £15 billion a year, of which £10 billion is due to ill-health.

On top of these there are issues of solar radiation, diesel exhaust particulate and excessive noise and vibration. It's quite a toxic mix. There is good news though—health is now on the agenda of both the regulator and business and there is learning we can take from our experience of managing risk in safety that can be applied to health.

But how do we begin approaching workplace health when it can seem so complex, technical and outside the comfort zone of many safety professionals?

Let's take a step back first and look at the whole picture of workplace health. The classic understanding of health at workcomes under the banner of **Occupational Health**.

This is the clinical arena that's concerned with managing the health of workers as it is today. It covers the work of doctors and nurses on things like fitness for work and health surveillance.



The whole picture of workplace health with three key areas

Wellbeing is the second dimension of health at work. This is about promoting healthy lifestyle choices at work.

Obviously, this brings benefits for both individuals and employers. The third dimension of health at work is

Occupational Hygiene. This is all about protecting people from workplace health risks. These are the risks the workplace itself creates; the man-made and entirely preventable risks. This dimension is the province of the scientific and engineering expertise of occupational hygienists. It's not about clinical health and treatment. It's about prevention. And it's the solution to employer's legal duties on workplace health.[2]

## The classic understanding of health at workcomes under the banner of Occupational Health.

If I was writing about safety culture transformation now, and I said to you that my organisation's entire strategy consisted of training first aiders you would be shocked. Yes you would say, that's a start, but it's woefully inadequate if that's your whole game plan. What about risk management, systems, competent people, leadership,

culture and engagement? Safety is primarily about prevention you would say

It's exactly the same with health – prevention really is better than cure. But, isn't the danger right now that we approach both physical and mental health solely in terms of health

As one SHE Director once said to me, "Are you saying to me that after all the effort we've put into strategy, systems, training, equipment and culture on safety, we've now got to do the same thing for health?"

promotion under the banner of Wellbeing. There is obviously some value in that, but if we are serious about health then surely everything starts with proper risk management of health exposures?

As one SHE Director once said to me, "Are you saying to me that after all the effort we've put into strategy, systems, training, equipment and culture on safety, we've now got to do the same thing for health?"

"What else were you thinking of doing?" I replied. ■



You manage risk, plan strategically and deal with the big picture

...why would it be any different with the health and wellbeing of your workforce?

Leave isolated initiatives behind and embrace a strategic health leadership framework to take your health culture to the next level.



### Managing Worker Fatigue





Clare Forshaw
Occupational Health and
Hygiene Partner,
Park Health & Safety

Clare is Safer Highways Lead on 'The Road to Wellbeing Framework and also the author of the Safer Highways Road to Wellbeing Survey.

She is also former Head of Centre for Health at the Health and Safety Executive.



Patigue and shift work are both recognised as having a potentially significant impact on the health and safety of the workforce. Most of us could surmise that the disrupted sleep and eating patterns caused by shift work would have a knock-on effect on a person's concentration and general good health. But did you know that shift work is a Category 2A carcinogen, as classified by the International Agency for Research on Cancer (IARC)?

Many of our road and highways workers will be required to work night and shift work that could subsequently impact on their health. Therefore, employers should be meeting their obligations to investigate the potential risk to this known carcinogen and prevent exposure where possible.

Fatigue can also lead to errors and accidents, ill-health and injury, as well as reduced productivity. Fatigue results in slower reactions, reduced ability to process information, memory lapses, absent-mindedness, decreased awareness, lack of attention, underestimation of risk, and reduced coordination. So, fatigue needs to be managed well to prevent ill health and increased risk of injury, but also to reduce the risk of other losses including unplanned operational outages and associated lost time, damage to plant,

property, equipment and reputation.

A useful approach to a Fatigue Management Plan is based on a shared responsibility model. This is where the employer commits to managing workplace risks that can impact on worker fatigue, i.e. work hours, work load and work environment. Individual workers are then required to ensure that they reduce the risk of their own fatigue by managing lifestyle and personal health factors (where this is possible i.e. newborn babies and young children keeping you up all night is something many would like to be able to manage better!!). The organisation can usefully assist in many aspects though by providing wellbeing advice and occupational health support to help individuals maximise fatigue reduction.

From an organisational perspective, there is a hierarchy in terms of tackling fatigue risk factors. Night work can be considered the largest contributor to risk. Avoiding night shifts, reducing the number of consecutive shifts and then reducing the individual shift length where possible would be a sensible initial process to follow. However, it is often the case that working shifts and particularly undertaking night work on the roads might be necessary not only for technical and quality reasons but also

Fatigue is the state of feeling very tired, weary or sleepy resulting from insufficient sleep, prolonged mental or physical work, shift work, or extended periods of stress or anxiety.

Boring or repetitive tasks can intensify feelings of fatigue.



## Impacts of fatigue

DECREASED

- decision making ability
- ability to do complex planning
- · communication skills
- productivity / performance
- attention and vigilance
- ability to handle job stress
- reaction time
- memory / ability to recall details

- tendency for risk-taking
- forgetfulness
- errors in judgement
- sick time and absenteeism
- medical costs
- accident rates

**INCREASED** 

Fatigue is regarded as having an impact on work performance. Most accidents occur when people are more likely to want sleep between midnight and 6 am, and between 1-3 pm.





One shift worker in five dozes off during a shift.



Staying awake for 24 hours straight affects the human body almost exactly like a blood alcohol level of .10%,





Night, evening, rotating and irregular shifts are associated with in increased risk of occupational injury due to worker fatigue and



as the safest (quietest) and least disruptive time to undertake the work, allowing more space and access to deliver the works required.

In addition to the hours worked and the scheduling of these hours another organisational risk factor you can influence relates to the demands upon the workforce, their need for time off and when this can be scheduled. Workload will play an important part – how cognitively and physically demanding are the roles required during the night shift and for how long do we expect these to be sustained (and the risks this entails if there are lapses).

From an organisational perspective, there is a hierarchy in terms of tackling fatigue risk factors. Night work can be considered the largest contributor to risk.

What is the work environment like – there can be some harsh conditions out on the road network – are there ways to provide suitable havens for workers to get some rest and recuperation throughout the shift? Have you considered how people travel to and from the work site or work pick up site? How far do they need to travel, and can you reduce the numbers having to drive whilst fatigued, particularly at the end of the shift?

So, let's accept that fatigue can certainly play a significant part in the health and safety of our road and highways workforce and that we should be proactively engaging with employees on what we plan to do to protect them and what they can do to safeguard themselves and manage their own fatigue susceptibility. In addition to good organisational management of the key fatigue risk factors, a significant contribution to managing the impact of fatigue can also be achieved through the provision of suitable welfare and wellbeing advice and support.







Borne out of the *award-winning* team that achieved the first Olympic build without a fatality, Park is a group of Partners operating at the cutting edge of *occupational safety, health & wellbeing practice.* 

Focussing on *leadership and culture*, our purpose is to positively influence performance by adapting then delivering strategic and tactical business *improvement services*.



If you think we can help you then please call us on 01296 310450 or email info@parkhs.co.uk www.parkhs.co.uk



#### Kier 'Raises the Bar' on Safety by increasing awareness of poor Mental Health

K ier Highways' mental health and wellbeing campaign "Safety in Mind" is gathering pace with the release of a series of videos examining the pressures and dangers road workers face.

Charlie's Story shows a road worker struggle to deal with the after-effects of a near miss he witnessed when working on the carriageway behind Kier's new mobile safety barrier. The film, which is part of a series of, aims to raise awareness of trained Mental Health First Aiders available

across the business to provide support to those in need

David Wright, executive director of Kier Highways, said: 'Like most people, we know the industry isn't great at tackling the issue of mental health, but this is our way of trying to do something about it.'

In the autumn of 2018, Kier Highways launched the mobile safety barrier with a safety video – Part 1 of Charlies Story. The footage shows a distracted road user colliding with the barrier while Charlie is working on site.

In December, Kier Highways followed this with Part 2 of Charlie's story where we began to see the level of impact an incident like this can have on an individual.

Mr Wright added: 'When I first saw the mobile safety barrier video, it was obvious to me that there was a much bigger issue to address than simply demonstrating the safety attributes of the barrier. We know that being involved in any sort of accident can have a detrimental impact on the individual and their families and so we wanted to to show that we understand this. We won't leave people to deal with these problems alone.'

The plight to improve health, safety and wellbeing across the industry is being supported by a safety sub-group comprising key players in the industry, at all levels of the supply chain.

Partners of the Collaborative Learning Circle (CLC) have been meeting to focus on addressing key issues in a more holistic way.

The industry isn't great at tackling the issue of mental health, but this is our way of trying to do something about it.

Mr Wright, who is the founder of CLC, said: 'We can only raise the bar by working together. Industry changing safety initiatives that we have been involved with in the past such as the removal of carriageway crossings for TM crews, the use of SafetyCam to control site traffic speeds/minimise incursions in roadworks and autonomous operations to remove the people/plant interface have all been the result of us working closely with our partners. This group will help us to keep moving forward in that way.'



The UK's leading specialist fleet provider

# BUSINESS IS BETTER WHEN YOU WOOK together



Over 40 years experience in managing and operating specialist vehicle fleets.

A team of experts managing 5000+ vehicles across our national network of 48 operational centres.

Why trust your fleet and hire requirements to anyone else?

Go Plant Fleet Services – our expertise your success



**Operated Sweeper Hire** 



Short Term Hire



Fleet Management



Servicing & Maintenance

#### **WORK RELATED ROAD SAFETY - VAN EXCELLENCE BRIEFINGS**



#### HAPPIER DRIVERS, SAFER HIGHWAYS



Mark Cartwright, Head Of Vans Freight Transport Association

The nation's mental health is at risk: more people than ever before are expressing their personal concerns to healthcare professionals and suicide is now recognised as the biggest killer of men under 45. But despite reaching epidemic levels, many of those struggling with poor mental health suffer in silence for fear of isolation, ridicule or lack of support from those around them. According to a recent Mercedes-Benz Vans study, one in five van drivers describe their current mental health as poor or very poor.

This can severely impact their driving ability and with 4.3 million vans on our roads, this means a huge number of people could need help and support. Construction workers, including those in road building and maintenance, are

equally likely to suffer: a study by Randstad found a quarter of the workforce is considering leaving the industry within the next year due to poor mental health.

FTA, the leading business organisation in the logistics sector, is using its Van Excellence scheme to highlight the problem of poor mental health and wellbeing among drivers on British roads, an area which is often overlooked by operators. While technical skill and legislative compliance is, of course, integral to road safety, many businesses overlook the importance of driver health and wellbeing on safety and performance. Drivers who get behind the wheel when they are unwell, exhausted or distracted by personal issues are less effective and more likely to be involved in an incident.

It is easy to see why people in this profession are prone to poor mental health – they often operate in highly pressured and isolated environments. The combination of unpredictable journey times, tight deadlines, a high workload and lack of social interaction can lead to stress, exhaustion, poor nutrition and dehydration. That is why

our Van Excellence Operational Briefings – back this Spring 2019 in Edinburgh, Derby, and London from 26 March to 2 April – will be tackling the physical, mental and safety challenges facing our industry today.

With a theme of The Industrial Athlete, the event will recognise the physical and mental demands that often come from driving professionally and equip operators with the tools and techniques they need to help strengthen their drivers' physical and mental health. Caring for drivers is one of the best ways for employers to improve the safety record of their businesses; operators of all fleet sizes will be able to pick up hints and tips on changing the health of their workforce at the sessions.

Places at FTA's Van Excellence
Operational Briefing can be booked for
£75 +VAT per person but readers of
Safer Highways will receive a 20%
discount on any bookings made. Book
at fta.co.uk/veob19 or call 03717 11 22
22 and quote SHVEOB19 for the
discount.



## Stop, think, act

Together with our clients, we're solving the world's most intricate challenges. We search out the connections others fail to make, to unlock creativity and deliver better, safer outcomes for the lives we touch every day. Prioritising health, safety and wellbeing isn't just something we say, it's the cornerstone of our culture and is rightly at the heart of our business strategy. By understanding the role and personal responsibilities that each of us has in the office, on site, when travelling and at home – we make working life safer and more fulfilling.

Opening opportunities with connected thinking.

mottmac.com



#### **Balfour Beatty**



